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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,698	10/02/2003	Jerome Gentillet	016295.1398	9772

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EXAMINER

RUTLAND WALLIS, MICHAEL

ART UNIT	PAPER NUMBER
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2835

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/677,698

Applicant(s)

GENTILLET ET AL.

Examiner

Michael Rutland-Wallis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-19 and 21-26 is/are rejected.
- 7) ☒ Claim(s) 10 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/06/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8-9 and 19-19 are rejected under 35 U.S.C. 112, first paragraph.

With respect to claims 8-9 the limitation of an enable input on the information handling system, is unclear. After a review of specification and drawings it is unclear where the enable input is or what input terminal applicant is intending to reference. Page 6 lines 7-9 recites, "A further function of the inputs 230 may be used as an enable for the outputs ...". Therefore as best can be understood by the examiner of record applicant's system does not poses a separate enable input and instead is function of the control input or input terminal, and will treated as such for the purpose of examination of the merits.

If applicant does in fact intend to claim a separate enable input, applicant should direct the examiner to a relevant potion of the specification to enable such a claim. Further the drawings should amended to show this limitations in order to be in compliance with 37 CFR 1.83(a). As it is not believed by the office this is applicant's intent the drawings currently are accepted.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sluijs (U.S. Pat. No. 6,437,545) in view of Yokomizo et al. (U.S. Pat. No. 6,400,211)

With respect to claims 1 and 11 Sluijs teaches DC-DC standby voltage converter (Fig. 3) comprising: a plurality of sequencers (items S1, S2, and S3 Sluijs teaches the switches are switched in a sequence by the controller item 9) each of the plurality of sequencers having a first input, a first output and a control input (see control lines output of controller item 9), wherein a voltage on the first input is sequenced on and off at the first output depending upon a logic state at the control input. Sluijs teaches the DC/DC converter may be designed to step-up or step down the voltage (see column 2 line 65 – column 3 line 5) and also teaches capacitors to smooth the voltage. Sluijs does not teach connection of charge pump circuit as claimed. Yokomizo teaches a DC/DC converter, which utilizes a charged pump with a control input and an input and output connection and voltage adjustment input see Fig. 2 for example. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sluijs to utilize a charge pump in such a configuration in order to boost the output voltage to devices with higher voltage requirements. While Sluijs is silent on the details

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of what load or how many loads may be connected to the converter. It would have been obvious to one of ordinary skill in the art at the time of the invention to connect a plurality of devices to the converter in order to supply reduce costs.

With respect to claims 2-3 and 12-13 Sluijs the plurality of standby voltages are sequenced on and off with the plurality of sequencers in an order programmed to the controller item 9.

With respect to claim 4 and 14 Sluijs teaches the output voltage may differ (column 4 lines 45-60)

With respect to claims 5-7 and 15-17 Sluijs the voltage levels may differ but Sluijs is silent on which voltage is higher and other. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the voltage increase or decrease or be equal relative to adjacent terminal in order to simplify the connection of devices.

Claim 8-9 and 19-19 are rejected as best can be understood by the examiner (see 112 rejection, page 2 of this action) Sluijs as modified by Yokomizo teach the control terminals provide the function of enabling the outputs of the converter. Sluijs as modified by Yokomizo teach the outputs impedance when disabled would indeed to high, as the connection would be open.

With respect to method claims 21-24 and 26, the method steps recited in the claims are inherently necessitated by the device structure as taught by the reference(s).

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sluijs (U.S. Pat. No. 6,437,545) in view of Yokomizo et al. (U.S. Pat. No. 6,400,211) as

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applied to claims 1, 11 and 21 above, and further in view of Ostojic (U.S. Pat. No. 6,771,052). Sluijs as modified by Yokomizo teach the method of claim 21 and the use of a controller but do not teach the use of a multiplexer in the selection of standby voltage. Ostojic teaches the use of multiplexed inputs into the DC/DC power control system (column 6 lines 1-10). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sluijs as modified by Yokomizo to further include the use of a multiplexer to select the voltage required in order to supply the correct voltages to the correct loads as taught by Ostojic.

Allowable Subject Matter

Claims 10 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: Sluijs as modified by Yokomizo teach the device of claims 1 and 11 but do not teach the further limitation of a multiplexer having at least two inputs, an output and a control input, wherein the control input determines which one of the at least two inputs is coupled to the output; and the output of the multiplexer is coupled to the first inputs of those plurality of sequencers not coupled to the at least one charge pump and the second input of the at least one charge pump. At least this further limitation to claims 1 and 11 is not taught or rendered obvious by the prior art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nojima et al. (U.S. Pat. No. 6,515,379) teaches power control device utilizing a standby DC/DC converter (Fig. 1 and 2), Tsuchiyama et al. (U.S. Pat. No. 5,821,738) teaches similar device of claims 1 and 11 without the use of sequencers, Kageyama (U.S. Pat. No. 6,815,843) teaches the details of prioritizing and sequencing power switching to multiple loads, and Kageyama et al. (U.S. Pat. No. 5,532,914) teaches a typical DC/DC converter and distribution configuration in Fig. 3.

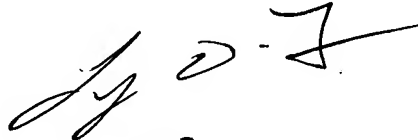
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Rutland-Wallis whose telephone number is 571-272-5921. The examiner can normally be reached on Monday-Thursday 7:30AM-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MRW



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